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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,015	10/22/2003	Mark Henry Samuel Berman	034423/268837	5008

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EXAMINER

SPERTY, ARDEN B

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,015

Applicant(s)

BERMAN ET AL.

Examiner

Arden B. Sperty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election 2/07/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/01/04, 10/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

NON-FINAL OFFICE ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-16, drawn to a nonwoven laminate, classified in class 442, subclass 327.
 - II. Claims 17-20, drawn to a process for producing a nonwoven laminate, classified in class 19, subclass 161.1.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process wherein each layer is prefabricated, then joined.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Raymond Linker, Jr. on February 7, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-16. Affirmation of this election must be made by applicant in replying to this Office action. Claims 17-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

7. Claim 5 is objected to because of the following informalities: There are two periods at the end of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. No further structural requirements are apparent from the limitations of claims 8 or 9. It is understood that a laminate meeting the limitations of

claim 1 inherently meets the limitations of claims 8 and 9. If applicant intends to imply further structural details beyond what is stated in claim 1, the claims should be drafted as such.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-2, 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6730622 to Curro et al.

12. The Curro reference teaches an electrical cable comprising first and second nonwoven webs **120, 140** (col. 7, lines 41-49) sandwiching a conductive sheet or web **130** (col. 7, lines 33-39 and col. 8, lines 24-26). Spunbond and meltblown materials are used as the first and second nonwoven webs (col. 7, lines 41-49). A metal sheet or web is used as the conductive material (col 7, lines 33-36). Regarding the hydrophobic microporous layer required by claim 1, the reference further teaches that the first and second web may be multilayer materials, and cites the non-limiting example of a nonwoven web joined to a thermoplastic polymer film (col. 8, lines 5-9). Exemplary microporous films made of hydrophobic materials are taught at column 2, lines 53-62.

The cable components pass through a nip roller for bonding (col. 7, lines 36-28). Claims 8 and 9 are inherently met, for reasons stated above.

Claim Rejections - 35 USC § 102/103

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-15 are rejected under 35 U.S.C. 102(b)/103(a) as being unpatentable over US 4217386 to Arons et al, as evidenced by Samuelson (EP 0399397).

15. The Arons reference teaches a laminated, active-carbon containing fabric comprising two outer spunbond layers **14**, two inner meltblown layers **15**, and a central active carbon layer **11**, bonded at spaced apart locations (col. 2, lines 3-27). The outer spunbond layers may be made of polyolefin or other inherently hydrophobic polymers (col. 3, lines 41+). The reference is silent with respect to microporosity of the hydrophobic meltblown layers. However, it is reasonable to presume that the meltblown layer is inherently microporous due to the microfiber size and the meltblowing method

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itself. The burden is shifted to Applicant to show otherwise. *In re Fitzgerald*, 205 USPQ 495.

In the alternative, it would have been obvious to one of ordinary skill in the art to provide a hydrophobic layer that is microporous in order to achieve the degree of breathability and moisture vapor permeability desired in the final product (col. 1, lines 25-40). See *In re Best*, 195 USPQ 433 as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

16. Specifically regarding claims 2-4, the reference teaches polymeric yarns comprising a carbon additive (col. 2, lines 58+).

17. While the reference is non-specific with regard to the basis weight and weight percent of the conductive layer, it would have been obvious to one of ordinary skill in the art to optimize the basis weights of each layer according to personal preference and the ultimate intended use. Optimization of basis weights is inherent in the art, therefore no patentable distinction is seen, absent a showing of unexpected results.

18. Specifically regarding claim 15, Arons includes non-limiting examples of the types of carbon-containing polymeric yarns for use in the woven fabric. Arons is not concerned with the exact structure of each yarn, however multicomponent carbon-containing polymeric yarns are conventional in the art and thus are not seen to contribute a patentable distinction over the teachings of Arons. EP 039939, cited in the IDS submitted by Applicant, is cited as support.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6808791 to Curro et al.

21. The Curro reference teaches a laminate web comprising outer nonwoven layers sandwiching a central layer, all joined by ultrasonic bonding (col. 6, lines 13-41). The outer nonwoven layers are spunbond (col. 16, lines 51-57). The reference teaches a central layer comprising conductive metal foil or a conductive nonwoven web (col. 7, lines 40-45, 61-67; col. 10, lines 27+). The conductive nonwoven web may be a conductive polymer (col. 7, lines 65-67). The reference further teaches the central layer comprising more than one central layer, depending on the ultimate intended use of the product (col. 14, line 62+). Among these intended uses is an electronic clothing application which takes advantage of the breathability and conductivity of the laminate web (col. 28, lines 11-22). Although the reference does not specifically disclose the details of this embodiment, teachings elsewhere in the reference indicate that a film which is breathable yet impervious to fluid (i.e. microporous and hydrophobic) contributes to a structure such as that described in the breathable, conductive clothing embodiment. Therefore, it would have been obvious to include the film to provide the final product with the desired breathable feature.

22. Although the reference is silent with respect to the basis weight and weight percent of the conductive layer, the reference clearly anticipates a variety of embodiments, each with unique desirable properties. It would have been obvious to one of ordinary skill in the art to determine the optimal basis weights for a particular ultimate intended use.

23. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arons, as applied to claim 1 above.

The Arons reference is concerned with the structure of the fabric itself. Post-treatment of the fabric for desired properties would be obvious based on numerous conventional uses for the fabric. Using a fluid repellant composition according to its intended usage is obvious. Thus, the claim does not provide patentable distinction over prior art fabrics.

Allowable Subject Matter

24. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

25. The following is a statement of reasons for the indication of allowable subject matter: While the prior art teaches a barrier laminate comprising outer spunbond layers with a hydrophobic microporous layer and an electrically conductive layer between the outer spunbond layers, the prior art does not teach or fairly suggest randomly arranged

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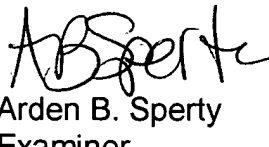
conductive fibers. The woven conductive carbon-containing fabrics do not anticipate a random fiber arrangement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arden B. Sperty whose telephone number is (571)272-1543. The examiner can normally be reached on M-Th, 08:00-16:00.

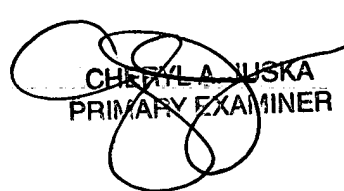
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571)272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arden B. Sperty
Examiner
Art Unit 1771

March 11, 2005



CHERYL A. JUSKA
PRIMARY EXAMINER